84. (Amended) The electronic program information preparing and transmitting apparatus according to claim 49, wherein the channel service is a television channel service, and the electronic program information is electronic program information for television broadcast.

Kindly add the following claims:

85. (New) The electronic program information preparing and transmitting apparatus according to 47, wherein the transmitting means is configured so that the broadcast data corresponding to the first type of electronic program information is under broadcast or is scheduled to be broadcast through the channel service through which the first type of electronic program information is broadcast.

86. (New) The electronic program information preparing and transmitting apparatus according to 59, wherein the transmitting means is configured so that the broadcast data corresponding to the first type of electronic program information is under broadcast or is scheduled to be broadcast through the at least one channel service through which the first type of electronic program information is broadcast.

REMARKS

Favorable consideration of the patentability of the claims as amended and as newly presented herein is respectfully solicited. It is believed that the petition for extension of time submitted herewith is sufficient to maintain the pendency of the instant application. If it is not, kindly consider this to be a petition for whatever time is needed to maintain this pendency. It is believed that the fee paid herewith is correct. However, if it is not, kindly credit or debit to appropriate amount in the undersigned attorneys' deposit account 07-1337. In the event that it is necessary in order to maintain the pendency of this application, kindly consider this to be a Notice of Appeal and charge the fee therefore to the referenced deposit account.

Claims 47-65 and 68-86 are now pending in this application. Claims 66 and 67 have been canceled, claims 85 and 86 have been added, and the remaining claims have been amended to clarify differences from the cited references. It is to be noted that the number of claims remains the same. It is recognized that this application is under final rejection and that the examiner has great latitude in entering or not entering amendments after final rejection. However, it is pointed out that the examiner has entered all new rejections in the last office action and has made these new rejections final even though these rejections have not been twice entered as provided for in 37 CFR 1.113. It is unfair for the examiner to enter an entirely new rejection and make it final in the first instance in order to prevent applicants from responding to the new action by amendment of the claims as required. It is therefore urged that the instant amendments be entered at least for purposes of appeal.

It should be noted that the invention now being claimed is the same invention that has been claimed all along. Only the exact verbiage of the claims has been amended in order to meet the new anticipation rejection that has been issued by the examiner. None of these amendments introduce prohibited new matter nor do they introduce any new issues that the examiner has not previously encountered. The examiner has issued a final rejection based at least in part on an anticipation theory. It is only fair and proper to permit applicants to amend to overcome this anticipation rejection. Entry of these amended claims is therefore solicited.

In the outstanding action, the examiner has rejected the patentability of claims 47-52, 55-57, 59, 62, 65, 76, 80-82 and 84 as being anticipated by the disclosure of the newly cited '329 patent. This rejection is respectfully traversed both as to the claims as they appeared prior to the issuance of this action or as to the claims as amended herein.

As provided for in the claim, especially claims 47 and 55, the present invention has the features of:

i) the preparation of first and second types of electronic program information, wherein each of these different program informations describe the same broadcast program, but do so in different details;

the first type of electronic program information has a first amount of detail and is adapted to be carried along with a flow of data broadcast by a particular channel service, and

the second type of electronic program information has a second amount of detail that provides a description of broadcast program that is different from the detail in the first type of program information. The second type of program information is adapted to be carried along with other flows of broadcast data that are different from said flow of data broadcast by the channel service;

ii) the prepared first and second types of electronic program information are distributed, respectively, with the first type being put into the flow of data broadcast by the channel service and the second type being put into other flows of broadcast data for transmission/broadcast to the receiving terminals.

Thus, in a practical manner according to the present invention, electronic program information, that is indicative of a given broadcast program that is transmitted by a particular broadcaster, is prepared with, respectively, a higher amount of program details and a lower amount of program details. One of these program informations, suitably the one with the greater amount of detail, is placed into a flow of data being broadcast by a particular channel service provider, that is, a particular broadcaster. The first type of information, that is the one preferably containing the greater amount of detail, is distributed for transmission to a unspecified large number of receiving units (general viewers).

In contrast, the second type of information is introduced into a further flow of broadcast data that is different from the foregoing channel service of the broadcaster. In this feature, a different channel service is provided for transmission of the second type of information that constitutes a different, preferably lower, amount of detail. Here too, the transmission is to a large, indeterminate number of receiving units (general viewers).

More practically, a given broadcaster channel service provides for the transmission, along with the "flow of broadcast data" (e.g., a transport stream), of a first type of program information that contains a greater amount of detail. This condition is shown for example in Fig. 2, in which, for example, the broadcaster channel service is identified as "ST100" and "the flow

of broadcast data" is identified as a transport stream "TS1." That is, the broadcaster's channel service "ST100" is provided along with the transport stream "TS1."

In contrast, a smaller amount of program information is carried in a further flow of broadcast data (a second transport stream) in which the foregoing channel service is not carried out (i.e., out of service). This condition is also shown for example in Fig. 2, in which, for example, "the further flow of broadcast data" is made up of transport streams "TS2" and "TS3," in which the certain channel service "ST100" is not provided.

As a result, the channel service ST100 is transmitted along with, and as part of, the transport stream TS1 having a higher degree of detail(specific/individual), whereas the information transmitted in the other transports TS2 and TS3 has a lower detailed degree (general). This is because the broadcast of the service ST 100 is assigned to TS1, not to TS2 and TS3 (i.e., the ST100 is not serviced in TS2 and TS3). The present invention is basically directed to such way of preparing the electronic program information and transmission.

Therefore, it should be clearly understood from the above comments, there is a distinctive difference between the present invention and disclosure of the Terakado et al. patent.

The Terakado et al. patent discloses an information providing apparatus and method, in which a hierarchy structure of data A1 to A3, including data of an electronic program guide, is used, as shown in Figs. 4A to 4C. The A1 data are composed of, for example, a broadcasting date, a start time, and an end time, that may possibly be changed. The A2 data are composed of for example a program name, that will not be changed. The A3 data are composed of still pictures, moving pictures, voice and others data, which can be a comparatively large amount of data. This hierarchy structure of data A1 to A3 makes it easier to cope with changes in the contents of the data including the program guide.

Despite this disclosure, the Terakado et al. patent absolutely does not disclose Applicants' claimed invention.

i) First of all, Terakado et al. fail to disclose or teach the configuration of preparing multiple electronic program informations **describing the same broadcast program with different amounts of detail** in the description; for example, a first information with a greater amount of detail and a second information with a lesser amount of detail, which, although they are different, describe the same program.

ii) Second, Terakado et al. fail to use a plurality (namely two) separate and distinct flows of broadcast data for transmitting the two types of electronic broadcast program information. That is, Terakado et al. do not disclose distribution of different types of electronic program information into different types of flows of broadcast data, respectively.

In Applicants' invention, a first type of electronic program information is distributed into a flow of broadcast data through which the channel service is carried out. That electronic program information has a greater amount of detail of description of the program to be broadcast. By contrast, a second type electronic program information is distributed into a different flow of broadcast data through which the channel service is not carried. This second program information contains a lesser amount of detail of description (at a rough (general) level).

There is a clear distinction between the instant claimed invention and the technology disclosed in the '329 patent. Put simply, the instant invention separately broadcasts two different levels of information about a single program to be broadcast. The two levels of information are broadcast over different "channels". The information with the higher degree of detail is broadcast on a channel that carries programs of the broadcaster. The information with the lesser degree of detail is broadcast by means other than a channel under the control of the program's broadcaster. Thus, one might say that the program information with the lesser degree of detail is an invitation to receivers who are not using the broadcaster's channel to switch to that channel. By way of contrast, the program information with the greater degree of detail is transmitted to receivers that are already involved with the broadcaster's channel and are merely seeking sufficient detail of the program to be broadcast to decide whether to view it.

Clearly, the disclosure of the '329 patent and the instant claims are directed to entirely different apparatus and methods of using that apparatus. It is believed that the instant claims

amply identify these differences in a manner that is sufficient to make the instant claimed invention patentable over this reference. The secondary reference, and the references that had previously been applied, have been considered, but no disclosure found therein that is antithetical to the patentability of the instant invention.

Respectfully submitted,

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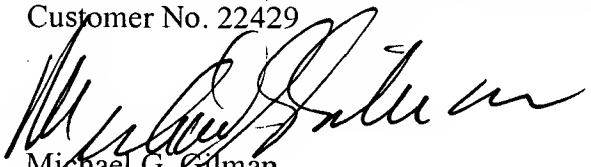

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APPENDIX

CLAIM AMENDMENTS

47. (Amended) An apparatus for preparing and transmitting electronic program information toward a plurality of receiving terminals, comprising:

electronic program information preparing means for preparing both [of a] first and second [type] types of electronic program information representative of the same broadcast program; wherein said first type of electronic program information has a first amount of detail, and is adapted to be carried along with a flow of [broadcast] data broadcast by [of other data related to] a [specific broadcast] channel service, and wherein said second type of electronic program information has a second[, different,] amount of detail[, has an at least partially different description of program information than] different, in description of program information representative of the same broadcast program, from said first type of program information, and is adapted to be carried [in] along with [a further] other flows of broadcast [of other] data that are different from said flow of broadcast data of the [specific broadcast] channel service;

electronic program information distributing means for distributing said prepared first and second types of electronic program information into both of the flow of [broadcast of] data [related to] broadcast by said [specific broadcast] channel service and said [further] other flows of broadcast [of] data, respectively; and

means for transmitting both of the flow [broadcast] of data [related to] broadcast by the [specific broadcast] channel service, that contains said first type of electronic program information, and the [further] other flows of broadcast data, that contain said second type of electronic program information, [of data] toward the receiving terminals.

48. (Amended) The electronic program information preparing and transmitting apparatus according to claims 47, wherein the electronic program information preparing means includes means for changing the first and second amounts of detail on the basis of [amount of] detail setting [electronic] information that [controls] indicates the amount of detail to be contained in said first and second types of electric program information, respectively.

49. (Amended) The electronic program information preparing and transmitting apparatus according to claim 47, wherein the [amount of detail contained in said] first program information [is] has a greater amount of detail describing said broadcast program [in description of program information] than the amount of detail in said second type of program information.

50. (Amended he electronic program information preparing and transmitting apparatus according to claim 49, wherein the electronic program information preparing means includes means for changing the first and second amounts of detail on the basis of [amount of] detail setting [electronic] information that [controls] indicates the amount of details to be contained in the first and second types of electric program information, respectively.

51. (Amended) The electronic program information preparing and transmitting apparatus according to claim 47, [further comprising] wherein said electronic program information preparing means [that] is configured to increase [at least one of] the first and second amounts of detail [as a function of additions to the] corresponding to the addition of a detailed program description [of a program] to the first and second types of electronic program information.

52. (Amended) The electronic program information preparing and transmitting apparatus according to claim 51, wherein the electronic program information preparing means further comprises means for changing the first and second amounts of detail on the basis of [electronic information] detail setting information that [controls] indicates the amount of detail to be contained in the first and second types of electric program information.

53. (Amended) The electronic program information preparing and transmitting apparatus according to claim 47, wherein the electronic program information preparing means is configured to increase [the amounts of detail contained in said first and second types of electronic program information corresponding to an increase in the descriptions of the first and second types of electronic program information caused by said program information extending over an increased period of time] each of the first and second amounts of detail as enabled by

increasing an amount of broadcast time during which each of the first and second types of electronic program information is described.

54. (Amended) The electronic program information preparing and transmitting apparatus according to claim 53, wherein the electronic program information preparing means further comprises means for changing the amount of detail in said first and second types of electronic program information on the basis of [electronic information amount of] detail setting information that indicates an [changed] amount of detail for the first and second types of electronic program information, respectively.

55. (Amended) A method of preparing and transmitting electronic program information toward a plurality of receiving terminals, comprising the steps of:

preparing both of a first type of [electric] electronic program information, having a first amount of detail, that is adapted to be carried along with [the transmission] a flow of [broadcast] data [related to a specific] broadcast by a channel service, and a second type of electronic program information having a second[, different in description,] amount of detail, different in description from said first type of program information, and that is adapted to be carried [in a different transmission of further] along with other flows of broadcast data different from the flow of data broadcast by the channel service, wherein the first and second types of electronic program information are so arranged as to be indicative of the same broadcast program;

distributing the prepared first and second types of electronic program information into the flow of [broadcast] data [of the specific] broadcast by the channel service and the [further] other flows of broadcast data, respectively; and

transmitting both of the flow of [broadcast] data broadcast by the channel service and the [further] other flows of broadcast data toward the plurality of receiving terminals.

56. (Amended) The method according to claim 55, wherein [there is a greater amount of detail in said first program information description than in said second program information description] the amount of detail in the first type of program information is greater in the description than the amount of detail in the second type of program information.

57. (Amended) The method according to claim 55, [further comprising increasing the amount of information in said first and second types of program information, respectively, and correspondingly increasing the first and second amount of detail] wherein the preparing step is configured to increase each of the first and second amounts of detail by adding a detailed program description to each of the first and second types of electronic program information.

58. (Amended) The method according to claim 57, wherein[, said increase in information is a function of including a longer period of time in the description of the first and second types of electronic program information] the preparing step is configured to increase each of the first and second amounts of detail as enabled by increasing a period of broadcast time during which each of the first and second types of electronic program information is described.

59. (Amended) An electronic program information preparing and transmitting apparatus for preparing and transmitting electronic program information toward a plurality of receiving terminals, comprising:

electronic program information preparing means for preparing a first type of electronic program information having a first amount of detail and that is adapted to be carried along with a flow [transmission] of [broadcast] data [of] broadcast by at least one of a plurality of [broadcast] channel services provided by a [central broadcast service station] broadcaster, and [having] a second type of electronic program information having a second, different, amount of detail and that is adapted to be carried [in a further flow] along with other flows of broadcast data of [a further] at least one other channel [service] service(s) that [is] are not provided by said [central broadcast service station] broadcaster, wherein the first and second types of electronic program information contain information that is descriptive of the same broadcast program;

electronic program information distribution [and transmitting] means for distributing the prepared first and second types of electronic program informations into [operative association with] the flow of [broadcast] data [of] broadcast along with said at least one broadcast channel service(s) provided by the [central broadcast service station] broadcaster and the [further] other flows of broadcast data of the [further] other channel [service] services, respectively; and

means for transmitting both of the flow of [broadcast] data broadcast via the broadcaster's channel and the [further] other flows of broadcast data[, including said electronic program informations,] respectively, toward the receiving terminals.

60. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the electronic program information preparing means further comprises means for changing the first and second amounts of detail in said first and second types of electronic program information, respectively, on the basis of [electronic information amount of] detail setting information that [controls] indicates the amount of detail that is acceptable in each of the first and second electronic program information.

61. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the electronic program information preparing means further comprises means for changing [the] a correspondence between [the] a channel service provided by each [broadcast service station] broadcaster and [the] a flow of broadcast data, by distributing the first and second types of electronic program information into the respective [transmissions] flows of broadcast data on the basis of information that revises correspondences between each [broadcast service station] broadcaster and the channel service provided by each [broadcast service station] broadcaster.

62. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the first amount of detail [has a] is [greater] higher in description of program information than [does] the second amount of detail.

63. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the electronic program information preparing means further comprises means for changing the first and second amounts of detail on the basis of [electronic information amount of] detail setting information that [controls] indicates the amount of detail acceptable in the first and second types of electronic program [informations] information.

64. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the electronic program information preparing means further comprises means for changing [the] a correspondence between [the] a channel service provided by each [broadcast service station] broadcaster and [the] a flow of broadcast data, by distributing the first and second types of electronic program [informations] information into the respective [transmissions] flows of broadcast data on the basis of information that indicates a change in the correspondences between each [broadcast service station] broadcaster and the channel service provided by each [broadcast service station] broadcaster.

65. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the electronic program information preparing means is configured to increase the first and second amounts of detail, corresponding[ly] to the addition of a further detailed description of each program[,] in the first and second types of electronic program [informations] information.

68. (Amended) The electronic program information preparing and transmitting apparatus according to claim 62, wherein the electronic program information preparing means further comprises means to increase the amount of detail in each of said first and second types of program information to correspond to a longer period of time [being included in] during which [the description of] the first and second types of electronic program [informations] information are described, respectively.

69. (Amended) The electronic program information preparing and transmitting apparatus according to claim 68, wherein the electronic program information preparing means further comprises means for changing the first and second amounts of detail on the basis of [electronic amount of] detail setting information that [controls] indicates the degree of detail in the first and second types of electronic program [informations] information.

70. (Amended) The electronic program information preparing and transmitting apparatus according to claim 68, wherein the electronic program information preparing means further comprises means for changing [the] a correspondence between [the] a channel service

provided by each broadcast serviced station and [the] a flow of broadcast data, by distributing the first and second electronic program information into the respective [transmissions] flows of broadcast data on the basis of information that indicates correspondences between each [broadcast service station] broadcaster and the channel service provided by each [broadcast service station] broadcaster.

71. (Amended) A method of preparing and transmitting electronic program information toward a plurality of receiving terminals, comprising the steps of:

preparing both:

a first type of electronic program information having a first amount of detail in its description of program information, and adapted to be carried [in] along with a flow of [broadcast] data [of] broadcast by at least one of a plurality of channel services provided by a [central broadcast service station] broadcaster, and

a second electronic program information having a second[, different, degree] amount of detail [in its description of program information], and adapted to be carried [in] along with a different flow of further [broadcast] data broadcast by [of] a different channel service that is not provided by the same [central broadcast service station] broadcaster,

wherein the second amount of detail is different in its description of program information from the first amount of detail, and wherein the first and second types of electronic program information describe the same broadcast program;

distributing the prepared first and second types of electronic program [informations] information into the flow of [broadcast] data [of] broadcast by at least one channel service provided by the [central broadcast service station] broadcaster and the different flow of further [broadcast] data [of] broadcast by the different channel service; and

transmitting both of the flow of broadcast data and the different blow of further broadcast data toward the receiving terminals.

72. (Amended) The method according to claim 71, [further comprising providing a greater amount of description detail in said first program information than the amount of

description detail in said second program information] wherein the first amount of detail has a greater amount of description than the second amount of detail.

73. (Amended) The method according to claim 72, wherein said preparing step further comprises increasing the first and second amounts of detail [corresponding] correspondingly to an addition of further descriptive detail [description] of each program to each of the first and second types of electronic program [informations] information.

74. (Amended) The method according to claim 72, wherein said preparing step further comprises increasing the amounts of detail in said first and second types of electronic program [informations] information [corresponding] correspondingly to descriptions of the first and second types of electronic program [informations] information that is enabled by having [cover] a longer period of broadcast time.

75. (Amended) An electronic program information preparing and transmitting apparatus for preparing and transmitting electronic information toward a plurality of receiving terminals, comprising:

describing means for describing information [about] indicating a broadcast program to be transmitted, using a transmission band that encompasses a plurality of channels, into [a] broadcast program information carried in each of the plurality of channels; and

means for transmitting the broadcast program information, channel by channel, toward the receiving terminals.

76. (Amended) An electronic program information preparing transmitting apparatus for preparing and transmitting electric program information toward a plurality of receiving terminals, comprising:

describing means for converting information[, about] indicating a broadcast program to be transmitted using a transmission band that [covers] encompasses a plurality of channels, into broadcast program information adapted to be carried in only one channel, and into reference information adapted to be carried in at least one other channel(s); and

means for transmitting the broadcast program information, channel by channel, toward the receiving terminals.

77. (Amended) An electronic program information receiving apparatus for receiving electric program information that has been transmitted, comprising:

determining means for determining whether or not the electric program information [about] indicating a broadcast program to be transmitted[, using] through a transmission band that encompasses a plurality of channels[,] is described in a program information carried in each of the channels to be used for the transmission of said broadcast program; and

means for, where the determination performed by the determination means is affirmative, displaying a program guide showing that the broadcast program is broadcast [using a] through the transmission band that encompasses [a] the plurality of channels.

78. (Amended) An electronic program information receiving apparatus for receiving electric program information that has been transmitted, comprising:

determining means for determining whether or not:

(1): information [about] indicating a broadcast program to be transmitted [using] through a transmission band that encompasses a plurality of channels is described in a broadcast program information carried in only one of the channels; and

(ii): only information that makes reference to the broadcast program is described in one or more remaining channels; and

[wherein] means for, if the determination performed by the determining means is affirmative, displaying a broadcast program guide showing that the broadcast program is the same as a program to be broadcast in at least one of the remaining channels.

79. (Amended) An electronic program information receiving apparatus for receiving electric program information that has been transmitted, comprising:

a first determining means for determining whether or not:

(i): information [about] indicating a broadcast program to be transmitted [using] through a transmission band that encompasses a plurality of channels is described in a broadcast program information carried in only one of the channels; and

(ii): only information that makes reference to the broadcast program is described in at least one remaining channel(s);

a first displaying means adapted, in cases where the determination performed by the first determining means is affirmative, to display on a broadcast program guide at least part of the information [about] indicating the broadcast program referred by a further broadcast program to be broadcast on at least one of the remaining channel(s)[, in cases];

a second determining means for determining whether or not either the broadcast program or the further broadcast program has been selected on the broadcast program guide; and

a second displaying means adapted to visually display both of the broadcast program and the further broadcast program that have been selected.

80. (Amended) The electronic program information preparing and transmitting apparatus according to 47, wherein the flow of broadcast data and the other flows of broadcast data are, respectively, [is] a transport stream to be transmitted.

81. (Amended) The method according to claim 55, [further comprising] wherein the transmitting step includes transmitting the flow of broadcast data and the other flows of broadcast data, respectively, in a form of transport stream.

82. (Amended) The electronic program information preparing and transmitting apparatus according to claim 59, wherein the flow of broadcast data and the other flows of broadcast data are, respectively, [is] a transport stream to be transmitted.

83. (Amended) The method according to claim 71, [further comprising] wherein the transmitting step includes transmitting the flow of broadcast data and the other flows of broadcast data, respectively, in a form of transport stream.

84. (Amended) The electronic program information preparing and transmitting apparatus according to claim 49, wherein the [broadcast] channel service [comprises] is a television channel service, and the electronic program information [comprises] is electronic program information for television broadcast.